

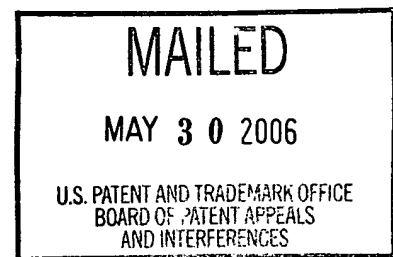
The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex Parte ALFRED B. LEVINE

Appeal No. 2006-1373
Application No. 09/814,054

ON BRIEF



Before RUGGIERO, SAADAT, and HOMERE, Administrative Patent Judges.

HOMERE, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 51 through 68, all of which are pending in this application.

Invention

Appellant's invention relates generally to a navigation system (figure 1) for guiding a driver-operated vehicle (30) to a selected destination (15). The navigation system includes a detecting means (13) for continually detecting exteriorly of the vehicle (30) the changeable location of the vehicle (14). The navigation system also includes a display

means (11) energized by the detecting means (13). The navigation system is further responsive to a driver chosen destination (15) to continually display on the display means (11) only a pair of uncluttered markings corresponding to the changeable location of the vehicle (14) and the fixed destination (15) without providing any specific routing path interconnecting the two markings (14, 15). The display means (11) further displays the two markings (14, 15) within the vehicle (30) in such a way that the driver can continually and safely observe them while operating the vehicle.

Claim 51 is representative of the claimed invention and is reproduced as follows:

51. A non-computing navigation system for guiding a driver operated vehicle to a selected destination by employing only an uncluttered two location representation of the changeable location of the vehicle referenced to that of the fixed location of the destination, and wherein the system does not provide any specific routing path between the two locations but instead enables the driver to select any routing path guided only by the two location representation,

detecting means for continually detecting exteriorly of the vehicle the changeable location of the vehicle,

display means energized by said digital detecting means and responsive to a driver chosen destination to continually display only a pair of uncluttered markings corresponding to the changeable vehicle location and that of the fixed destination location, said display being free of any routing path interconnecting the two markings,

said markings being displayed within the vehicle in such manner that they can be continually observed by the driver without diverting attention from safe driving of the vehicle.

References

The Examiner relies on the following references:

Ohmura et al.	6,208,932	March 27, 2001 (filed Sept. 23, 1997)
Kubon	5,682,030	October 28, 1997
Asano et al.	5,587,911	December 24, 1996

Rejections At Issue

- A. Claims 51, 52, 55-65, 67 and 68 stand rejected under 35 USC 103 as being unpatentable over the combination of Asano et al. and Ohmura et al.
- B. Claims 53, 54 and 66 stand rejected under 35 USC 103 as being unpatentable over the combination of Asano et al, Ohmura et al. and Kubon.

Rather than reiterating the arguments of Appellant and the Examiner, the opinion refers to respective details in the Briefs¹ and the Examiner's Answer.² Only those arguments actually made by Appellant have been considered in this decision. Arguments, which Appellant could have made but chose not to make in the Briefs have not been taken into consideration. See 37 CFR 41.37(c)(1) (vii) (eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the Examiner's rejections, the arguments in support of the rejections and the evidence of obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration Appellant's arguments set forth in the Briefs along with the Examiner's rationale in support of the of the rejections and arguments in the rebuttal set forth in the Examiner's Answer.

It is our view, after full consideration of the record before us, that we do not agree with the Examiner that claims 51, 52, 55-65, 67 and 68 are properly rejected under 35 USC

¹ Appellant filed an Appeal Brief on June 24, 2005. Appellant filed a Reply Brief on November 01, 2005.

² The Examiner mailed an Examiner's Answer on October 19, 2005. Examiner mailed an office communication on February 03, 2006, stating that the Reply Brief has been entered and considered.

103 as being unpatentable over the combination of Asano et al. (“Asano”) and Ohmura et al. (“Ohmura”). We further do not agree with the Examiner that claims 53, 54 and 66 are properly rejected under 35 USC 103 as being unpatentable over the combination of Asano, Ohmura and Kubon. Accordingly, we reverse the Examiner’s rejections of claims 51-68 for the reasons set forth **infra**.

Appellant has indicated that for purposes of this appeal the claims stand or fall together in three (3) groups. See page 5 of the Appeal Brief. However, the reasons set forth **infra** are applicable to all the claims. Therefore, we will consider Appellant’s claims as standing or falling together, and we will consider claim 51 as being representative of the claimed invention.

I. Under 35 USC § 103, is the Rejection of Claims 51, 52, 55-65, 67 and 68 as being Unpatentable Over the Combination of Asano and Ohmura Proper?

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. “In reviewing the [E]xaminer’s decision on appeal, the

Board must necessarily weigh all of the evidence and argument.” **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. “[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency’s conclusion.” **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

With respect to claims 51, 52, 55-65, 67 and 68, Appellant argues at pages 7 and 8 of the Appeal Brief that the proposed combination of Asano and Ohmura does not teach displaying only two markings corresponding to the changeable location of the vehicle and the selected destination without showing any routing path interconnecting the two markings, as required by the claimed invention. Particularly, at page 7 of the Appeal Brief, Appellant states the following:

All of the claims in this first group of broadest claims define a navigation system wherein the vehicle is guided by heading direction alone using a single display or communication consisting of only two dots or markings on the screen. The Asano et al. patent is entirely different as described above. It guides the vehicle along a fixed, defined, computed travel routing using a series of different displays (eg. FIG. 7(a), FIG. 7(b), FIG 7(c) etc.) each of which is selected by the driver by depressing a different screen switch.

All of the rejected claims in this first group specify that the two dot single display is the only display or communication to guide the vehicle, and the driver can select any available travel route to a desired destination being guided only by the two dots or markings.

Appellant further expands on this same argument in the Reply Brief. In particular, at pages 1 and 2 of the Reply Brief, Appellant states the following:

In the patent, a ‘determined route path’, eg. the entire travel route from start to finish 63 (Fig. 7(a)), is ALWAYS computed by the system, and the vehicle is guided to follow along this entire route 63. In the present invention, there is no determined or entire travel route for the vehicle to follow. The driver is guided only by directional heading and can follow any route that he chooses to follow. This directional heading guidance is

provided by only two flashing light dots or markings that are presented on the vehicle display (eg. Windshield).

... Still further, the present invention NEVER provides the driver with an “entire travel route” to be followed. Instead, it continuously displays only two angularly displaced dots or markings to show the direction to be followed to reach the destination.

In order for us to decide the question of obviousness, “[t]he first inquiry must be into exactly what the claims define.” **In re Wilder**, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). “Analysis begins with a key legal question-- what is the invention claimed?” ...Claim interpretation...will normally control the remainder of the decisional process.” **Panduit Corp. v. Dennison Mfg.**, 810 F.2d 1561, 1567-68, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987), **Cert denied**, 481 U.S. 1052 (1987).

We note that independent claim 51 reads in part as follows:

display means energized by said digital detecting means and responsive to a driver chosen destination to continually display only a pair of uncluttered markings corresponding to the changeable vehicle location and that of the fixed destination location, said display being free of any routing path interconnecting the two markings,

Appellant’s specification indicates that only the two markings corresponding to the changing vehicle location and the fixed destination are displayed on the display means. Particularly, at page 4, line 30 to page 5, line 22, Appellant’s specification states that:

The receiver screen 11 may display a map of the area, zone, or other region being traveled by the vehicle, with the X-Y coordinated [sic] of the dots 14 and 15 being located on such map at the correct street or road locations. However, according to the invention, such map display is unnecessary, since the operator of the vehicle need only note the relative positions of the two flashing light dots 14 and 15 on the screen 11 and control the vehicle direction in order to bring about convergence of the two dots 14 and 15 on the screen toward each other.

As thus far described therefore, the vehicle operator need only note the distance and direction between the two light dots 14 and 15 on the screen as the vehicle proceeds from location to location, and control the vehicle heading so as to continually or incrementally head toward the selected end destination. Returning to FIG. 1, the vehicles compass heading can be shown by a heading display vector 18 on the screen 11 (provided by an electronic compass 17 energizing the receiver 10.)

In operation, as the vehicle proceeds from each location to the next, the light dot 14 shows such movement on the screen 11 to continually show the vehicle location on map displayed on the screen, or merely its X-Y coordinate location on the screen 11 without a map display. Whenever, the vehicle deviates from a correct heading direction, due to traffic congestion, road repairs, accidents, or any other reason, the dots 14 and 15 on the screen 11 diverge away from each other, and a new directional heading is required to be followed by the vehicle to reach its selected destination.

Thus, the claim does require displaying only two markings corresponding to the changeable location of the vehicle and the selected destination without showing any routing path interconnecting the two markings.

Now the question before us is what Asano and Ohmura would have taught to one of ordinary skill in the art? To answer this question, we find the following facts:

1. Asano states at column 6, lines 34-66 that:

In FIG. 4, the route from the present position to the destination has ten roads and nine branching points. These roads and branching points are related to road numbers, road names and branching point names, as shown in FIG. 5.

As shown in FIG. 6, the route information screen indicates not only the distances between the branching points (indicated by circles) on the routes from the present position to the destination, but also the names of the roads and branching points in the route. This example is derived from the data shown in FIG. 5.

FIGS. 7(a) to 7(c) show the searched route on a entire route map screen (FIG. 7(a)) and shows the screen transitions for acquiring the route information. The entire route map screen, as designated at 6 in FIG. 7(a), is formed with a map display panel 60 on which is displayed a determined route 63, extending from the present position of the vehicle, as indicated by

a present position mark 61, to the destination, as indicated by a destination mark 62. The map display panel 60 is provided with, as input means: a route change key 64 for changing the entire route indicated, namely, for commanding a re-search; a route information key 65 for calling up a route information screen 7; and a guide start key 66 for starting navigation along the displayed route.

A route information screen 7, as shown in FIG. 7(b), is opened by pushing the route information key 65 in the entire route map screen 6 of FIG. (7a), and lists the road names and the branching point names on the route ahead of the present position. For the route display, a branching point mark 72 is shown as lying ahead of a present position mark 71 toward the destination, and a road is indicated at 73 by parallel lines together with distances 74 in between.

2. Ohmura states in the abstract of the invention that:

A vehicle navigation system for guiding a vehicle to a preselected destination by continually communicating the heading direction to be followed regardless of any detours away from a direct heading. In one embodiment, a two phase system is provided to initially guide the vehicle to a zonal area containing the destination, and in the second phase, guiding the vehicle, by communicating local information, directly to a specific destination within said zonal area. The system can employ bar coded signs being read by a remote reader on the vehicle to obtain detailed information concerning the vehicle location, the streets-roads in the vicinity of each sign, traffic control information; parking and fuel availability, and specific street-road address information.

With the above discussion in mind, we find that the Asano-Ohmura combination teaches away from the claimed invention. First, Asano's teaching violates the requirements set forth in the claim limitation. Asano teaches, as depicted in figure 4, displaying two markings corresponding to the present position of the vehicle and the selected destination. *Asano also teaches displaying a routing path interconnecting the position of the vehicle and the selected destination. The claimed invention, in contrast, expressly requires that only the present location of the vehicle and the selected destination be displayed without showing any routing path interconnecting them.* Such a violation of the claim limitation

was not remedied by the Ohmura³ reference despite its teaching of providing to the driver only the necessary information without offering any excessive amount of information. We agree with Appellant that the combination of Asano and Ohmura does not satisfy the claimed limitation of displaying only the present position of the vehicle and the selected destination without showing any routing path interconnecting them.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have not suggested to one of ordinary skill in the art the invention as set forth in claims 51, 52, 55-65, 67 and 68. Accordingly, we will not sustain the Examiner's rejection of claims 51, 52, 55-65, 67 and 68.

II. Under 35 USC 103, is the Rejection of Claims 53, 54 and 66 as Being Unpatentable over the combination of Asano, Ohmura and Kubon Proper?

With respect to dependent claims 53, 54 and 66, Appellant argues at page 10 of the Appeal Brief that the Asano-Ohmura-Kubon combination does not teach the claimed two-phase system, wherein the first phase entails displaying only two markings indicative of the present location of the vehicle and the selected destination while the second phase entails identifying individual buildings and landmarks at the destination.

We find that Kubon is concerned with converting a composite video signal into a form suitable for a bar code decoder to detect the companion bar code within a composite video signal. The Kubon reference is particularly relied upon for its teaching of a bar code detector to identify road signs on the vehicle's path. See figure 16. The Kubon reference, however, fails to cure the deficiencies of the Asano-Ohmura combination, as noted above

³ This reference is relied upon for its teaching of Heads-up Display, whereby route information is displayed on the windshield of the vehicle, as depicted in figure 1.

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ALFRED B. LEVINE
P.O. BOX 34-1738
BETHESDA, MD 20827